

SIXTH GRADE ENVISION MATH CURRICULUM MAP
CANYONS SCHOOL DISTRICT
2011 – 2012

Curriculum Mapping Purpose

Canyons School District's curriculum math maps are standards-based maps driven by the Common Core State Standards and implemented using Scott Foresman-Addison Wesley enVisionMATH ©2011. Student achievement is increased when both teachers and students know where they are going, why they are going there, and what is required of them to get there. To that end, curriculum maps answer these questions:

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
<i>What do students know?</i>	<i>What concepts and skills do students need to know?</i>	<i>How will students learn the standards?</i>	<i>What vocabulary is necessary for depth of understanding?</i>

Curriculum Maps are a tool for:

- **ALIGNMENT:** Provides support and coordination between concepts, skills, standards, curriculum, and assessments
- **COMMUNICATION:** Articulates expectations and learning goals for students
- **PLANNING:** Focuses instruction and targets critical information
- **COLLABORATION:** Promotes professionalism and fosters dialogue between colleagues about best practices pertaining to sequencing, unit emphasis and length, integration, and review strategies

These maps were collaboratively developed and refined by teacher committees using feedback from classroom teachers, achievement coaches, building administrators, and the office of Evidence-Based Learning. It is with much appreciation that we recognize the many educators that collaborated in the effort to provide these maps for the teachers and students of CSD. Specific individuals that have assisted in the writing and editing of this document include:

Tana	Allred	Karen	Davis	Sheila	McDonald
Marlene	Barbano	Celeste	Erickson	Julie	McFarland
Karen	Bentley	Julie	Fielding	Kimille	Moreton
Catherine	Bond	Barbara	Foltz	Debbie	Owens
Trish	Boswell	Patricia	French	Teresa	Ramey
Jen	Buttars	Melissa	Garber	Joani	Richardson
Rebekah	Callahan	LaNae	Goates	Piper	Riddle
Wendy	Casperson	Elizabeth	Gould	Amber	Roderick-Landward
Trudy	Cloward	Amanda	Hansen	Jan	Shreeve
Stephanie	Cobabe	Lisa	Hubbard	Cathy	Sunderland
Bethany	Cordes	Tanya	Johnson	Nancy	Swinyard
MaryLou	Damjanovich	Kimberly	Jones	Tara	Toraya
Tami	Dautel	Jones	Karlie	Jessica	Vidal
Steve	Davies	Emigh	Lo	LeeAnne	Walker

TABLE OF CONTENTS

Sixth Grade Common Core At-a-Glance	page 1
Common Core Standards for Mathematical Practice	page 2
General Instructions for the Map	page 3
Sixth Grade Year at a Glance	pages 4-5
Sixth Grade Map	pages 6–25
Sixth Grade Assessment Continuum	page 27-28
The Core and More Lesson Checklist	pages 29-32

Sixth Grade Overview**Ratios and Proportional Relationships**

- Understand ratio concepts and use ratio reasoning to solve problems.

The Number System

- Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- Compute fluently with multi-digit numbers and find common factors and multiples.
- Apply and extend previous understandings of numbers to the system of rational numbers.

Expressions and Equations

- Apply and extend previous understandings of arithmetic to algebraic expressions.
- Reason about and solve one-variable equations and inequalities.
- Represent and analyze quantitative relationships between dependent and independent variables.

Geometry

- Solve real-world and mathematical problems involving area, surface area, and volume.

Statistics and Probability

- Develop understanding of statistical variability.
- Summarize and describe distributions.

Four Critical Areas

In Grade 6, instructional time should focus on four critical areas:

- connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems;
- completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers;
- writing, interpreting, and using expressions and equations; and
- developing understanding of statistical thinking.

Common Core Practice Standards**Overarching habits of mind of a productive mathematical thinker**

1. Make sense of problems and persevere in solving them
6. Attend to precision

Reasoning and explaining

2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others

Modeling and using tools

4. Model with mathematics
5. Use appropriate tools strategically

Seeing structure and generalizing

7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

The Common Core Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important processes and proficiencies with longstanding importance in mathematics education.

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|--|--|
| 1. Make sense of problems and persevere in solving them. | 5. Use appropriate tools strategically. |
| 2. Reason abstractly and quantitatively. | 6. Attend to precision. |
| 3. Construct viable arguments and critique the reasoning of others. | 7. Look for and make use of structure. |
| 4. Model with mathematics. | 8. Look for and express regularity in repeated reasoning. |

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

“The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word “understand” are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices” (CCSS, 2010).

- Common Core State Standards Initiative, 2010: Mathematics>Introduction>Standards for Mathematical Practice @ Corestandards.org

Grade 6

General Instructions

Purpose

This map was created by 6th grade teachers as a scope and sequence to guide and support math curriculum planning and instruction for the year. Please adjust as necessary to meet students' needs.

Topics

Topics identified as review are covered in a previous grade. After assessing your students re-teach as necessary.

Topics identified as core must be covered.

Topics identified as enrichment can be used as needed.

Cumulative Review

It is critical to provide an ongoing review of previously taught concepts and skills. EnVision's Daily Spiral Review works great!

Assessment

Topic assessments will be digitally available on SuccessNet CFA accounts. Topic assessment will also be available in PDF form on the District web Math page and Math teacher wiki page.

Pre-Assessments can be a topic assessment, CFA, or of your own design.

Common Core Lessons (CC)

These lessons are part of the common core but not currently presented in enVision math. Each team will receive a paper copy of these lessons. They will also be available digitally on SuccessNet Teacher and CFA accounts.

Common Formative Assessment (CFA)

CFA's are an informational assessment for you as a teacher. CFA's are one form of assessment, and the data should be used to help guide and inform your instruction.

For example: Which problem(s) did all students get correct? Which problem(s) did a lot of students miss? What concepts need to be re-taught?

There is a period of time (from a few days to 2 weeks) between the end of instruction and the deadline for completion of CFA's.

CFA #1 by November 11 covers Topics 1, 2, 3, 4, & 5

CFA #2 by January 31 covers Topics 6, 7, 8, 9, & 10

CFA #3 by March 30 covers Topics 12, 13, 14, 15

CFA #4 by May 18 covers Topics 17, 18, & 19

MATH Year-at-a-Glance 2011-2012

6th Grade

MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
Numeration	Topic 1 (6 days)	
Variables, Expressions and Properties	Topic 2 (11 days)	M-CBM (M-COMP/M-CAP) Sept. 5 -13
Operations with Decimals	Topic 3 (13 days)	
Solving Equations	Topic 4 (7days)	CFA # 1 Topics 1-5 Completed by Nov. 10
Number and Fraction Concepts	Topic 5 (8 days)	
Decimals, Fractions, and Mixed Numbers	Topic 6 (5 days)	
Adding and Subtracting Fractions	Topic 7 (7 days)	
Multiplying Fractions and Mixed Numbers	Topic 8 (8 days)	
Dividing Fractions and Mixed Numbers	Topic 9 (9 days)	CFA # 2 Topics 6-10 Completed by Jan. 31
Integers	Topic 10 (6 days)	

MATH Year-at-a-Glance 2011-2012

6th Grade

MATH CONCEPTS	TOPICS from EnVision	CFA and CBM ASSESSMENT DATES
Ratios, Rates, and Proportions Solving Proportions Converting Measures Using Ratio Reasoning	Topic 12 (10 days) Topic 13 (7 days) Topic 16 (1 day)	M-CBM (M-COMP/M-CAP) Jan. 9 -27
Understanding Percent Equations and Graphs	Topic 14 (8 days) Topic 15 (6 days)	CFA #3 Topics 12-16 Completed by March 30
Perimeter and Area Volume and Surface Area	Topic 17 (5 days) Topic 18 (9 days)	
Data and Graphs	Topic 19 (14 days)	
	CRT Review	M-CBM (M-COMP/M-CAP) May 7 - 25 CFA #4 Topic 17-19 Completed by May 18

TOPIC 1: NUMERATION
CLASS SETUP, STUDENT SKILL SCREENING
SUGGESTED TEACHING TIME: 6 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Diagnostic Test Topic 1 Test	Trillion Exponential form Base Exponent/Power Decimal Expanded form
REVIEW		Topic 1-1:Place Value; 1-2: Comparing and Ordering Whole Number; 1-4: Decimal Place Value; 1-5: Multiplying and Dividing by 10, 100, and 1,000; 1-6: Comparing and Ordering Decimals	
CORE	6.EE.1	Topic 1-3: Exponents and Place Value, pg. 10	
EXTEND		Topic 1-7: Problem Solving: Make an Organized List	
ASSESS		Topic 1 Assessment	Topic Assessment available on district math website (PDF) and school CFA account (digital).

TOPIC 2: VARIABLES, EXPRESSIONS, AND PROPERTIES

SUGGESTED TEACHING TIME: 11 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 2 Test	Variable Coefficient Algebraic expression Commutative property of addition Commutative property of multiplication Associative property of addition Associative property of multiplication Identity property of addition Identity property of multiplication Order of operations Distributive property Evaluate Substitution Input/output table
CORE	6.EE.2, 6.EE.2A, 6.EE.2B, 6.EE.6	Topic 2-1: Using Variables to Write Expressions	
CORE	6.EE.3	Topic 2-2: Properties of Operations	
CORE	6.EE.3	Topic 2-3: Order of Operations	
CORE	6.EE.3	Topic 2-4: The Distributive Property	
CORE	6.EE.3	CC-1: The Distributive Property and Algebraic Expressions	
CORE	6.EE.2, 6.EE.2.b, 6.EE.2.c, 6.EE.3, 6.EE.6	Topic 2-6: Evaluating Expressions	
CORE	6.EE.2.a	Topic 2-7: Using Expressions to Describe Patterns	
CORE	6.EE.2.a	Topic 2-8: Problem Solving: Make a Table	
ASSESS		Topic 2 Test	Topic Assessment available on district math website (PDF) and school CFA account (digital).

TOPIC 3: OPERATIONS WITH DECIMALS

SUGGESTED TEACHING TIME: 13 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY AND NOTES
PRE-ASSESS		Topic 3 Test	Estimate Compatible numbers Inequality
CORE	Prepares for 6.NS.3	Topic 3-1: Estimating Sums and Differences	
CORE	6.NS.3	Topic 3-2: Adding and Subtracting	
CORE	Prepares for 6.NS.3	Topic 3-3: Estimating Products and Quotients	
CORE	6.NS.3	Topic 3-4: Multiplying Decimals	
CORE	6.NS.2	CC-2: Dividing Whole Numbers	
CORE	6.NS.2; 6.NS.3	Topic 3-5: Dividing Whole Numbers	
CORE	6.NS.3	Topic 3-6: Dividing a Whole Number by a Decimal	
CORE	6.NS.3	Topic 3-7: Dividing Decimals	
CORE	6.NS.2; 6.NS.3; 6.EE.2.c	Topic 3-8: Evaluating Expressions	
CORE	6.EE.5, 6.EE.6	CC-3 Expressions and Equations	

EXTEND		Topic 3-9: Scientific Notation	
CORE	6.NS.3	Topic 3-10: Problem solving: Multiple Step Problems	
ASSESS		Topic 3 Assessment	

TOPIC 4: SOLVING EQUATIONS

SUGGESTED TEACHING TIME: 7 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 4 Test	Equation Addition property of equality Subtraction property of equality Multiplication property of equality Division property of equality Inverse relationship
CORE	6.EE.3, 6.EE.4	Topic 4-1: Properties of Equality	
CORE	6.EE.5, 6.EE.6, 6.EE.7	Topic 4-2: Solving Addition and Subtraction Equations	
CORE	6.EE.7	Topic: 4-3: Problem Solving: Draw a Picture and Write an Equations	
CORE	6.EE.5; 6.EE.7	Topic 4-4: Solving Multiplication and Division Equations	
CORE	6.EE.6; 6.EE.7	Topic 4-5: Problem Solving: Draw a Picture/Write an Equation	
ASSESS		Topic 4 Assessment	

TOPIC 5: NUMBER AND FRACTION CONCEPTS

SUGGESTED TEACHING TIME: 8 days

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 5 Test	Multiple Divisible Prime number Composite number Prime factorization Greatest common factor Fractions Numerator Denominator Equivalent fractions Simplest form Conjecture
REVIEW		Topic 5-1: Factors, Multiples and Divisibility	
CORE	Prepares for 6.NS.4	Topic 5-2: Prime Factorization	
REVIEW	6.NS.4,	Topic 5-3: Greatest Common Factor, Topic 5-4: Understanding Fractions, Topic 5-5: Equivalent Fractions, Topic 5-6: Fractions in Simplest Form, Topic 5-7: Problem Solving: Make and Test Conjectures	
ASSESS		Topic 5 Assessment	CFA #1: Deadline Nov. 10 (Topics 1-5)

TOPIC 6: DECIMALS, FRACTIONS, AND MIXED NUMBERS

SUGGESTED TEACHING TIME: 5 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 6	Proper fraction Improper fraction Mixed number Terminating decimal Repeating decimal
REVIEW		Topics 6-1: Fractions and Division 6-2: Fractions and Decimals 6-3: Improper Fractions and Mixed Numbers 6-4: Decimal Forms of Fractions and Mixed Numbers	
CORE	6.NS.6.c	Topic 6-5: Problem Solving: Draw a Picture	
ASSESS		Topic 6 Assessment	

TOPIC 7: DECIMALS, FRACTIONS, AND MIXED NUMBERS

SUGGESTED TEACHING TIME: 7 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 7	Like denominators Common multiples Least common multiples (LCM) Unlike denominators Least common denominator (LCD)
REVIEW		Topic 7-1: Adding and Subtracting: Like Denominators	
CORE	6.NS.4	7-2: Least Common Multiples	
REVIEW		7-3: Adding and Subtracting: Unlike Denominators; 7-4: Estimating Sums and Differences of Mixed Numbers; 7-5: Adding Mixed Numbers; 7-6: Subtracting Mixed Numbers; 7-7: Make a Table	
ASSESS		Topic 7 Test	

TOPIC 8: DECIMALS, FRACTIONS, AND MIXED NUMBERS

SUGGESTED TEACHING TIME: 8 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 8 Test	
REVIEW		Topic 8-1: Multiplying a Fraction and a Whole Number; 8- 2:Estimating Products; 8-3: Multiplying Fractions; 8-4: Multiplying Mixed Numbers	
CORE	6.NS.3	Topic 8-5	
ASSESS		Topic 8 Assessment	

TOPIC 9: DIVIDING FRACTIONS AND MIXED NUMBERS

SUGGESTED TEACHING TIME: 9 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 9 Test	Reciprocals
CORE	6.NS.1	Topic 9-1: Understanding Division of Fractions	
REVIEW		Topic 9-2: Dividing a Whole Number by a Fraction	
CORE	6.NS.1	Topic 9-3: Dividing Fractions	
CORE	6.NS.1	Topic 9-4: Estimating Quotients	
CORE	6.NS.1	Topic 9-5: Dividing Mixed Numbers	
CORE	6.NS.7	Topic 9-6: Solving Equations	
ASSESS		Topic 9 Assessment	

TOPIC 10: INTEGERS

SUGGESTED TEACHING TIME: 6 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 10 Test	This topic includes operations with integers that are NOT part of the common core standards. You do NOT need to teach lessons 10-4, 10-5, 10-6, 10-7, 10-8, and problems in 10-10 using negative integers.
CORE	6.NS.5, 6.NS.6, 6.NS.6.a, 6.NS.6.c, 6.NS.7, 6.NS.7.c	Topic 10-1: Understanding Integers	Opposites Integers Absolute value Rational number Coordinate plane x- and y-axes quadrants ordered pair origin
CORE	6.NS.6.a, 6.NS.6.b, 6.NS.7.c, 6.NS.7.d	Topic CC-4: Absolute Value	
CORE	6.NS.7, 6.NS.7.a, 6.NS.7.b	Topic 10-2: Comparing and Ordering Integers	
CORE	6.NS.6, 6.NS.6.c, 6.NS.7, 6.NS.7.a, 6.NS.7.b	Topic 10-3: Rational Numbers on a Number Line	
EXTEND		Topic 10-4: Adding Integers, Topic 10-5: Subtracting Integers; Topic 10-6: Multiplying Integers, Topic 10-7: Dividing Integers, 10-8: Solving Equations with Integers	

CORE	6.NS.6, 6.NS.6.b, 6.NS.6.c, 6.NS.8	Topic 10-9: Graphing Points on a Coordinate Plan	
CORE	6.G.3; 6.NS.8	CC-5: Finding Distance on the Coordinate Plane	
CORE	6.NS.8	Topic 10-10	Use the actual problem solving problems; avoid problem #9 in student book.
ASSESS		Topic 10 Assessment	CFA #2 Deadline January 31st (Topic 6-10)

TOPIC 12: RATIOS, RATES, AND PROPORTIONS

SUGGESTED TEACHING TIME: 10 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 12 Test	Ratio Terms Proportion Rate Unit rate Formula
CORE	6.RP.1	Topic 12-1: Understanding Ratios	
CORE	6.RP.1	Topic 12-1: Understanding Ratios	
CORE	6.RP.3.a	Topic 12-2: Equal Ratios and Proportions	
CORE	6.RP.2	Topic 12-3: Understanding Rates and Unit Rates	
CORE		Topic 12-4: Comparing Rates	
CORE	6.RP.3.b	Topic 12-5: Distance, Rate, and Time	
CORE	6.RP.1, 6.RP.2, 6.RP.3	Topic 12-6: Problem Solving: Draw a Picture	
ASSESS		Topic 12 Assessment	

TOPIC 13: SOLVING PROPORTIONS**TOPIC 16: MEASUREMENT**

SUGGESTED TEACHING TIME: 8 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 13 Test	
CORE	6.RP.3 6.RP.3.a	Topic 13-1: Using Ratio Tables	
CORE	6.RP.2; 6.RP.3.b	Topic 13-2: Using Unit Rates	
CORE	6.RP.3	CC-6: Applying Ratios	
CORE	6.RP.3.a	CC-7: Ratios and Graphs	
EXTEND	6.RP.3	Topic 13-3: Ways to Solve Proportion	
CORE	6.RP.3.b	Topic 13-4: Problem Solving: Writing to Explain	
EXTEND		Topic 13-5: Similar Figures	
EXTEND		Topic 13-6: Maps and Scale Drawings	
CORE	6.RP.3.d	TOPIC 16: CC-9: Converting Measures Using Ratio Reasoning	
ASSESS		Topic 13 Assessment	

TOPIC 14: UNDERSTANDING PERCENT

SUGGESTED TEACHING TIME: 8 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARDS	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 14 Test	percent
CORE	6.RP.3	Topic 14-1: Understanding Percent	
CORE	6.RP.3	Topic 14-2: Fractions, Decimals, and Percent	
CORE	Extends 6.RP.3	Topic 14-3: Percents Greater than 100 and Less than 1	
CORE	6.RP.3	Topic 14-4: Estimating Percent	
CORE	6.RP.3.c	Topic 14-5: Finding the Percent of a Number	
EXTEND		Tips, Taxes, Discounts and Simple Interest	
ASSESS		Topic 14 Assessment	

TOPIC 15: EQUATIONS AND GRAPHS

SUGGESTED TEACHING TIME: 6 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARDS	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 15 Test	t-table linear equation independent variable dependent variable
CORE	6.EE.7	Topic 15-1: Equations with More Than One Operation	
CORE	6.EE.9	Topic 15-2: Patterns and Equations	
CORE	6.EE.9	Topic 15-3: More Patterns and Equations	
EXTEND		Topic 15-4: Graphing Equations	
EXTEND		Topic 15-5: Graphing Equations with More Than One Operations	
CORE	6.EE.5; 6.EE.8	CC-8: Understanding Inequalities	
EXTEND		Topic 15-6: functions	
CORE	6.EE.5	Topic 15-7: Problem Solving: Act It Out and Use Reasoning	
ASSESS		Topic 15 Assessment	CFA #3 Deadline: March 30 (Topics 12-16)

TOPIC 17: PERIMETER AND AREA

SUGGESTED TEACHING TIME: 5 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 17 Test	Perimeter Area
CORE	6.EE.2.c 6.EE.7	Topic 17-1: Perimeter	
CORE	6.EE.2.c 6.EE.7, 6.G.1	Topic 17-2: Area of Rectangles and Irregular Figures	
CORE	6.EE.2.c 6.EE.7, 6.G.1	Topic 17-3: Area of Parallelograms and Triangles	
CORE	6.G.1	CC-10: Finding Area of Polygons	
EXTEND		Topic 17-4: Circumference	
EXTEND		Topic 17-5: Area of a Circle	
EXTEND		Topic 17-6: Problem Solving: Use Objects	
ASSESS		Topic 17 Assessment	

TOPIC 18: VOLUME AND SURFACE AREA

SUGGESTED TEACHING TIME: 9 DAYS

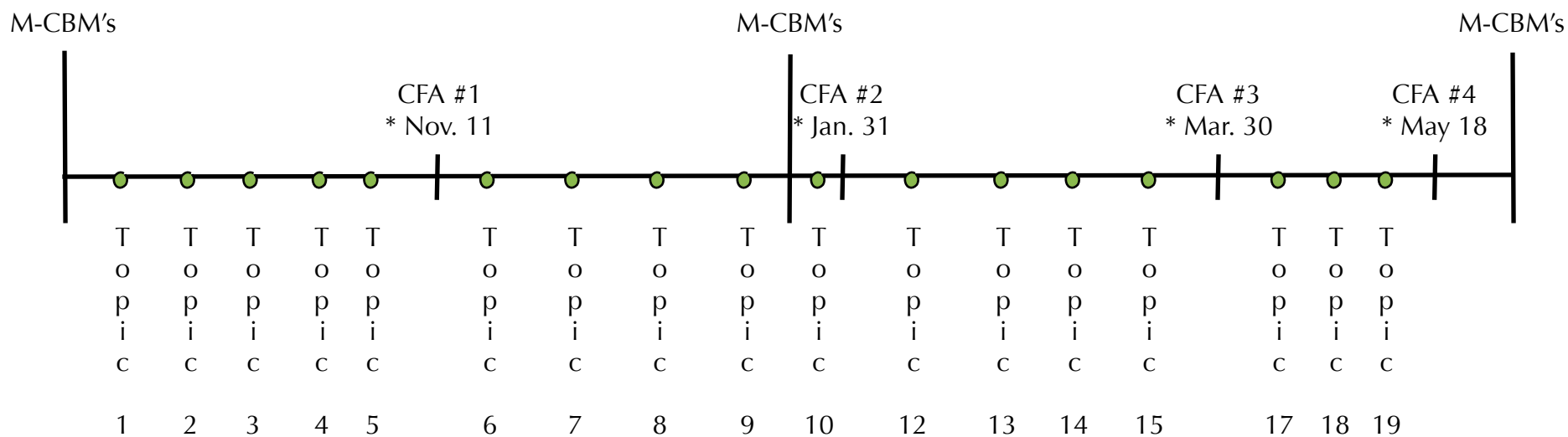
REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 18 Test	Polyhedron Face Edge Vertex Cylinder Sphere Cone Prism Pyramid Net
CORE		Topic 18-1: Solid Figures	
CORE		Topic 18-2: Surface Area	
REVIEW		Topic 18-3: Volume of Rectangular Prisms	
CORE	6.G.2	CC-11: Volume of Rectangular Prisms with Fractional Edge Lengths	
EXTEND		Topic 18-4: Volume of Triangular Prisms and Cylinders	
CORE		Topic 18-5: Problem Solving: Use Objects and Reasoning	
ASSESS		Topic 18 Assessment	

TOPIC 19: DATA AND GRAPHS
SUGGESTED TEACHING TIME: 14 DAYS

REVIEW, CORE, EXTEND, ASSESS	COMMON CORE STANDARD	ENVISION LESSON	VOCABULARY & NOTES
PRE-ASSESS		Topic 19 Test	Statistical question Data distribution Outlier Mean Average Median Mode Range Frequency table Histogram Box plot Quartiles Absolute deviation Mean absolute deviation
EXTEND		Topic 19-1: Reading and Making Graphs; 19-2: Circle Graphs; 19-3: Comparing Graphs; 19-4: Problem Solving: Make a Graph	
CORE	6.SP.1 6.SP.5.b	CC-12: Statistical Questions	
CORE	6.SP.2	CC-13: Looking at Data Sets	
CORE	6.SP.3 6.SP.5.c	CC-14: More on Mean	
CORE	6.SP.5.c	CC-15: More About Median, Mode, and Range	
CORE	6.SP.3 6.SP.5.c	CC-16: Measures of Variability	
CORE	6.SP.4, 6.SP.5.a	Topic 19-6: Frequency Tables and Histograms	
CORE	6.SP.4	Topic 19-7: Stem and Leaf Plots	
CORE	6.SP.4	CC-17: Box Plots	
CORE	6.SP.5.d	Topic 19-8:	

		Appropriate Use of Statistical Measures	
CORE	6.SP.5.d	CC-18: Using Statistical Measures	
CORE	6.SP.5.a 6.SP.5.b 6.SP.5.c 6.SP.5.d	CC-19: Describing Data Distributions	
EXTEND		Topic 19-9: Samples and Surveys	
CORE	6.SP.5.d	Topic 19-10: Using Statistics to Draw Conclusions	
CORE	6.NS.3	Topic 19-11: Problem Solving: Try, Check and Revise	
ASSESS		Topic 19 Assessment	CFA # 4 Deadline: MAY 18 (Topic 17-19)

**6th grade
CSD Math Assessment
Continuum
2011-12**



● = optional assessment

* Please submit quarterly CFA scores
to your school principal by this date.

6th Grade CCSS Vocabulary Word List
Revised 5/24/11

absolute value	difference
acute triangle	distribution
addend	Distributive Property
Additive Identity Property of 0	dividend
additive inverses	divisor
algebraic expression	dot plot
algorithm	double number line diagram
altitude	equation
area	equilateral triangle
Associative Property of Addition	equivalent
Associative Property of Multiplication	equivalent ratio
attribute	evaluate
axis (pl. axes)	exponent
base of a polygon	expression
box plot	factor
cluster	first quartile
coefficient	formula
common denominator	fraction
common factor	gap
common multiple	graph
Commutative Property of Addition	greater than
Commutative Property of Multiplication	greatest common factor
compose	height
constant	histogram
constant speed	improper fraction
coordinate pair	independent variable
coordinate plane	inequality
coordinate system	infinite
coordinates	integers
cube	interquartile range
customary system	isosceles triangle
data	least common multiple
decompose	less than
denominator	line plot
dependent variable	lower extreme

6th Grade CCSS Vocabulary Word List**Revised 5/24/11**

magnitude	rate
maximum	ratio
mean	rational number
mean absolute deviation	reciprocals
measure of center	rectangle
measure of variation	right rectangular prism
median	right triangle
metric system	scalene triangle
minimum	signed number
minuend	solid figure
mixed number	spread
multiple	square-based pyramid
Multiplicative Identity Property of 1	statistical variability
multiplicative inverses	statistics
negative numbers	substitution
net	subtrahend
number line	sum
numerator	surface area
numerical expression	table
obtuse triangle	tape diagram
opposite	term
Order of Operations	third quartile
ordered pair	three-dimensional
origin	triangular prism
outlier	triangular pyramid
percent	unit cube
plot	unit rate
polygon	upper extreme
positive numbers	value
prism	variable
product	vertex (vertices)
proportion	volume
pyramid	whole numbers
quadrants	x-axis
quadrilateral	x-coordinate
quantity	y-axis
quotient	y-coordinate
range	

The Core **and MORE** Instruction Checklist

The CCSS Standard: The Envision Lesson:	
EXPLICIT INSTRUCTION I do it, We do it, Y'all do it, You do it	ENGAGEMENT All Students Saying, Writing, Doing
PROACTIVE PLANNING	VOCABULARY WORDS
The following questions should be considered for each part of the lesson: <ul style="list-style-type: none"> - What are the predictable failures for this lesson? (conceptually and behaviorally) - How will you prevent these failures? - What will you do to maintain consistency? - How will you know if it is working? 	
<div> <input type="checkbox"/> cumulative review <input type="checkbox"/> higher-order thinking, ask why <input type="checkbox"/> have students visualize, draw, model <input type="checkbox"/> real-world contexts </div> <div> <input type="checkbox"/> math vocabulary <input type="checkbox"/> milk the data <input type="checkbox"/> incorporate measurement <input type="checkbox"/> number sense </div>	
ANTICIPATORY SET	
Choose from the many options: <ul style="list-style-type: none"> <input type="checkbox"/> Review What You Know <input type="checkbox"/> Interactive Math Stories <input type="checkbox"/> Math Journaling <input type="checkbox"/> Spiral Review <input type="checkbox"/> Problem of the Day 	(5 MINUTES) <ul style="list-style-type: none"> <input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)

BUILDING A FOUNDATION		(5-10 MINUTES)
<i>The Language of Math: Vocabulary instruction</i> 1- How will you explicitly teach new vocabulary? 2- How will you provide multiple opportunities for vocabulary to be used in context?		<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)
WHOLE GROUP INSTRUCTION: Concrete		(10-15 MINUTES)
<i>Develop the Concept: Interactive Learning (Hands-on)</i> 1- What materials/manipulatives will you need? 2- Will each student have enough materials to model the problems? -If they do not, will you have them pair up or adjust the problems? 3- Where will students record their work during this phase of the lesson? 4- How will you check for understanding during this phase of the lesson? 5- Will you use the <i>Extend</i> ? 6- Will you use the <i>Link to Investigations</i> ?		<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <ul style="list-style-type: none"> <input type="checkbox"/> Paper <input type="checkbox"/> Math Journal <input type="checkbox"/> Individual Whiteboards <input type="checkbox"/> Student page from the topic pouch <input type="checkbox"/> Random call on students (No hand raising)
SCAFFOLDED INSTRUCTION: Representational		(15-20 MINUTES)
<i>Develop the Concept: Visual</i> The <i>Visual Learning Bridge</i> , at the top of each lesson, is critical to connecting the Concrete to the Representational and then to the Abstract. Look for <i>Prevent Misconceptions</i> . Choose one option: <input type="checkbox"/> <i>Visual Learning Animation</i> (on-line or CD) <input type="checkbox"/> Overhead Transparency <input type="checkbox"/> <i>Visual Learning Bridge</i> in Student textbook <input type="checkbox"/> Document camera 1- Check for understanding during the <i>Guided Practice</i> .		<input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)

<p>2- Where will students record their work?</p> <p>3- If most students are struggling during this phase of the lesson, what will you do?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reteach explicitly with various problems from the <i>Guided or Independent Practice</i> or the <i>Reteaching</i> sets at the back of the <i>Topic Guide</i>. <input type="checkbox"/> Use lessons from <i>Meeting Individual Needs</i>. <input type="checkbox"/> Use the <i>Differentiated Instruction: Intervention</i> lesson. <p>4- Will some of the problems from the <i>Problem Solving</i> be included in your <i>Guided Practice</i> or <i>Independent Practice</i>?</p>	
INDEPENDENT PRACTICE: ABSTRACT	
<p><i>Independent Practice and Problem Solving</i></p> <p>1- Which problems will you assign?</p> <p>2- Where will students record their work?</p> <p>3- Will you collect, grade and record the independent practice?</p> <p>4- How will you check for understanding?</p> <p>5- If students do not finish the problems assigned for independent practice, will these problems be homework?</p>	<p>(15-20 MINUTES)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Choral Responses <input type="checkbox"/> Partner Responses <input type="checkbox"/> Written Responses <input type="checkbox"/> Random call on students (No hand raising)
FORMATIVE ASSESSMENT	
<p>(5-10 MINUTES)</p> <p>Concept Understanding</p> <ul style="list-style-type: none"> <input type="checkbox"/> PLC/Grade-Level common formative assessment <input type="checkbox"/> <i>Quick Check</i> (in <i>Teacher Resource Masters</i>) <input type="checkbox"/> <i>Writing to Explain</i> <input type="checkbox"/> <i>Mind Game Quiz Show</i> <input type="checkbox"/> Student buzzers or AverPens <p>Formative Assessment Tools</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>Topic tests</i> (online or in text) <input type="checkbox"/> <i>Item Analysis for Diagnosis and Intervention</i> <input type="checkbox"/> <i>Free-Response Test</i> <input type="checkbox"/> <i>Performance Assessment</i> <input type="checkbox"/> CBM-Math <input type="checkbox"/> PLC/Grade-Level common formative assessment <input type="checkbox"/> Other assessment tool <p>End of each Quarter:</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>District Common Formative Assessment (CFA)</i> 	

CENTER ACTIVITIES

(15 - 45 MINUTES)

*This part of the lesson is beneficial for providing engaging activities while the teacher works with small groups of students who need supplemental instruction.

Choose from the many options:

- ☐ *Differentiated Instruction*
- ☐ *Math Project*
- ☐ *Meeting Individual Needs*
- ☐ *Teacher-led interventions*
- ☐ *Leveled Homework*
- ☐ *Online games from Envision Digital Premium*

- 1- Will you do these activities and if so, when?
- 2- When will you give directions on how to play?
- 3- What materials will be needed for the activities?
- 4- Will you work with the Intervention group?
- 5- How will you determine which activities will be assigned to each group of students?

HOMEWORK

Choose from the many options:

- ☐ *Finish Independent Practice and/or Problem Solving assignment*
- ☐ *Spiral Review*
- ☐ *Quick Check*
- ☐ *Leveled Homework*
- ☐ *Online games from Envision Digital Premium*
- ☐ *Online tutorials from Envision Digital Premium*

- 1- Will you collect and grade homework?
- 2- Will you discuss homework? Is so, when?